

Metabolism

Metabolism is the sum of all of the chemical reactions in a cell or in the body.

The **energy** transferred by **respiration** in cells is used by the organism for the continual **enzyme controlled** processes of metabolism that synthesise new molecules.

Metabolic reactions include:

- Conversion of glucose to starch, glycogen and cellulose
- Formation of lipids from **one** molecule of **glycerol** and **three** molecules of **fatty acids**
- Respiration
- Breakdown of excess proteins to form urea for excretion
- Glucose and nitrate ions form amino acids which are used to make proteins.